

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

Intravisaual Inc.,

Plaintiff,

v.

Fujitsu Limited, et al.,

Defendants.

CIVIL ACTION NO. 2:10-cv-90 (JRG)

JURY TRIAL DEMANDED

DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF
PURSUANT TO P.R. 4-5(b)

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LEGAL STANDARD.....	3
III.	THE INTRINSIC EVIDENCE.....	5
A.	The Specification	5
B.	The Prosecution History	9
C.	The Claims	13
IV.	CONSTRUCTION OF DISPUTED TERMS.....	14
A.	“difference with the reference macroblock”	14
1.	The plain and ordinary meaning of the claim language requires that the difference take into account the entire reference macroblock.	14
2.	The ’845 patent is limited to macroblock-based difference calculations as described in the specification and file history.....	15
3.	Intravidual’s arguments do not overcome the intrinsic record.....	16
4.	The ’845 patent does not encompass the use of a subset of pixels from a macroblock for difference calculations.....	17
B.	“encoded with the difference based on the reference macroblock”	17
C.	“difference bit” and “reference bit”	18
D.	“macroblock” / “reference macroblock” / “coded macroblock”	20
1.	“macroblock”	21
2.	“reference macroblock”	21
3.	“coded macroblock”	22
E.	Storing Component,” “Receiving Component,” and “Decoding Component” Should Be Construed Under 35 U.S.C. § 112 ¶ 6.....	22
1.	The Disputed Terms Are Purely Functional Terms	23
2.	The Disputed Terms Do Not Convey Structure.....	24
3.	The Cases Cited By Intravidual Are Distinguishable	27
V.	CONCLUSION.....	28

TABLE OF AUTHORITIES

CASES

<i>Apex Inc. v. Raritan Computer, Inc.</i> , 325 F.3d 1364 (Fed. Cir. 2003).....	23
<i>Ariad Pharms., Inc. v. Eli Lilly & Co.</i> , 598 F.3d 1336 (Fed. Cir. 2010).....	3
<i>Astrazeneca AB v. Mutual Pharm. Co.</i> , 384 F.3d 1333 (Fed. Cir. 2004).....	4
<i>Autogiro Co. of Am. v. United States</i> , 384 F.2d 391 (Ct. Cl. 1967)	3
<i>Beneficial Innovations, Inc. v. Blockdot, Inc.</i> , No. 2:07-CV-263-TJW-CE, 2010 U.S. Dist. LEXIS 35784 (E.D. Tex April 12, 2010).....	28
<i>C.R. Bard, Inc. v. U.S. Surgical Corp.</i> , 388 F.3d 858 (Fed. Cir. 2004).....	4, 15
<i>Computer Docking Station Corp. v. Dell, Inc.</i> , 519 F.3d 1366 (Fed. Cir. 2008).....	12
<i>eWinWin Inc., v. Groupon Inc.</i> , No. 8:10-cv-2678, 2011 WL 6012194 (M.D. Fla. Sept. 5, 2011).....	27
<i>Graham v. John Deere Co. of Kan. City</i> , 383 U.S. 1 (1966).....	4
<i>Greenberg v. Ethicon Endo-Surgery</i> , 91 F.3d 1580 (Fed. Cir. 1996).....	26
<i>Hockerson-Halberstadt, Inc. v. Avia Group Int’l, Inc.</i> , 222 F.3d 951 (Fed. Cir. 2000).....	12, 15
<i>Honeywell Int’l, Inc. v. ITT Indus.</i> , 452 F.3d 1312 (Fed. Cir. 2006).....	3, 4, 15
<i>Innova/Pure Water, Inc. v. Safari Water Filtration Sys.</i> , 381 F.3d 1111 (Fed. Cir. 2004).....	3
<i>Inventio AG v. Thyssenkrupp Elevator Ams. Corp.</i> , 649 F.3d 1350 (Fed. Cir. 2011).....	28
<i>IPXL Holdings, L.L.C. v. Amazon.com, Inc.</i> , 430 F.3d 1377 (2005).....	24

<i>Isogon Corp. v. Amdahl Corp.</i> , 47 F. Supp. 2d 436 (S.D.N.Y. 1998).....	26
<i>Leader Technologies, Inc. v. Facebook, Inc.</i> , 692 F.Supp. 2d 425 (D. Del. 2010).....	27
<i>Lighting World, Inc. v. Birchwood Lighting, Inc.</i> , 382 F.3d 1354 (Fed. Cir. 2004).....	27, 28
<i>Markman v. Westview Instruments, Inc.</i> , 52 F.3d 967 (Fed. Cir. 1995).....	3
<i>Mas-Hamilton Group v. LaGard, Inc.</i> , 156 F.3d 1206 (Fed. Cir. 1998).....	26
<i>Massachusetts Institute of Technology v. Abacus Software</i> , 462 F.3d 1344 (Fed. Cir. 2006).....	26, 27
<i>Microsoft Corp. v. Multi-Tech Sys., Inc.</i> , 357 F.3d 1340 (Fed. Cir. 2004).....	4, 15
<i>Netcraft Corp. v. Ebay, Inc.</i> , 549 F.3d 1394 (Fed. Cir. 2008).....	4
<i>Norian Corp. v. Stryker Corp.</i> , 432 F.3d 1356 (Fed. Cir. 2005).....	4
<i>Nystrom v. Trex Co.</i> , 424 F.3d 1136 (Fed. Cir. 2005).....	4
<i>Omega Eng'g, Inc. v. Raytek Corp.</i> , 334 F.3d 1314 (Fed. Cir. 2003).....	5
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303, 1312 (Fed. Cir. 2005).....	3, 4, 26
<i>Power Integrations v. Fairchild Semiconductor</i> , 422 F .Supp. 2d 446 (D.Del. 2006).....	26
<i>Purdue Pharma L.P. v. Endo Pharms., Inc.</i> , 438 F.3d 1123 (Fed. Cir. 2006).....	4
<i>SSL Servs., LLC v. Citrix Sys.</i> , 816 F. Supp. 2d 364 (E.D. Tex. 2011).....	3
<i>Toro Co. v. White Consol. Indus., Inc.</i> , 199 F.3d 1295 (Fed. Cir. 1999).....	15
<i>Univ. of Rochester v. G.D. Searle & Co.</i> , 358 F.3d 916 (Fed. Cir. 2004).....	3
<i>Verizon Services Corp. v. Vonage Holdings Corp.</i> , 503 F.3d 1295 (Fed. Cir. 2007).....	4, 15

<i>Versata Software, Inc. v. SAP Am., Inc.</i> , No. 2:07-cv-153, 2009 U.S. Dist. LEXIS 45751 (E.D. Tex. May 19, 2009)	15
<i>VLT Corp. v. Lambda Electronics, Inc.</i> , 238 F. Supp. 2d 347 (D. Mass. 2003)	14
<i>VLT, Inc. v. Artesyn Techs., Inc.</i> , 103 Fed. Appx. 356 (Fed. Cir. 2004)	14
<i>Watts v. XL Sys., Inc.</i> , 232 F.3d 877 (Fed. Cir. 2000)	15
<i>Welker Bearing Co. v. PHD, Inc.</i> , 550 F.3d 1090 (Fed. Cir. 2008)	25

STATUTES

35 U.S.C. § 112	passim
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Pursuant to the February 7, 2012 Docket Control Order (ECF No. 274) and P.R. 4-5(b), Defendants NXP Semiconductors USA, Inc. and NXP B.V., and Texas Instruments Incorporated submit this Responsive Claim Construction Brief setting forth proposed constructions for claim terms and limitations in U.S. Patent No. 6,614,845 (“the ’845 Patent”), and respond to Plaintiff Intravital Inc.’s Opening Claim Construction Brief (ECF No. 284) (“Intravital’s Brief”).

I. INTRODUCTION

Dr. Faramarz Azadegan, the inventor of the asserted ’845 patent may well have been a prolific inventor, but he did not, as Intravital alleges, invent the H.264 video compression standard presently used in consumer electronics devices. The ’845 patent was filed in 1997, six years before the H.264 compression standard was released, and claims a specific improvement to the then-existing H.263 video compression standard described and incorporated by reference into the specification.

Techniques for video compression (also called coding and encoding) were well-known at the time that the application was filed. As is commonly understood, a video is a series of pictures (frames) played in rapid succession. Video compression technologies seek to reduce the video size, usually by reducing the amount of redundant or unnecessary data without compromising the viewing experience. One approach, inter-frame compression, seeks to eliminate redundancy between successive frames. Another approach, intra-frame compression, seeks to reduce data within a single frame.¹ Because techniques for intra-frame compression (including the standards discussed in the specification) were known when Dr. Azadegan filed the application for the ’845 patent in 1997, the ’845 patent does not claim intra-frame compression generally. Instead, the ’845 patent claims a specific coding approach described in the specification and asserted claims as confirmed during the prosecution of the patent. The asserted claims are directed to decoding video encoded in accord with the invention.

¹ Intravital’s Brief at 5.

To understand intra-frame compression, it is helpful to understand the content of an individual frame. A video frame (or picture) is made up of individual pixels. In part to facilitate compression, the pixels of a video may be grouped into blocks.² The blocks, in turn may together form a macroblock.³ Figure 5 of the '845 patent illustrates the “deconstruction” of a video sequence down to the pixel level. The '845 patent describes and claims an approach in

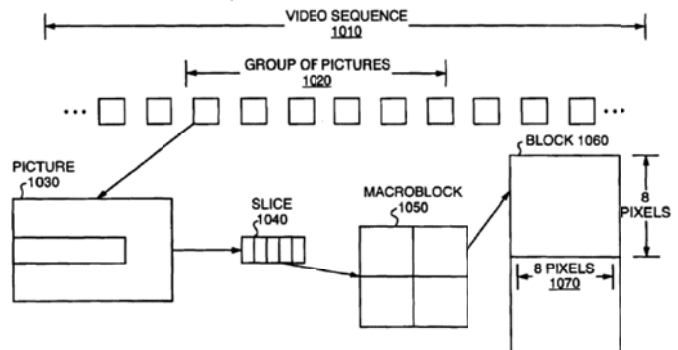


FIG. 5

which intra-frame coding is performed by comparing and calculating differences between entire macroblocks adjacent to one another, and in which the comparison is based on the pixel values of a macroblock *as a whole*.

The importance of coding using macroblock-based comparison was emphasized throughout the prosecution of the '845 patent. The coding and decoding claims were all amended to clarify that the difference calculation occurred between macroblocks, and not some other unit (a block or a subset of pixels).

Intravidual ignores the prosecution history and rewrites the claims to claim coding and decoding based on something other than difference between entire adjacent macroblocks in an effort to read the asserted claims on the H.264 standard. Similarly, Intravidual seeks to read out other limitations to impermissibly broaden the scope of the claims beyond that supported by the intrinsic record. Defendants' proposed constructions, on the other hand, are consistent with the intrinsic evidence. Defendants' constructions should be adopted.

² E.g., '845 patent 8:26-45, fig. 5.

³ E.g., '845 patent 8:12-15, fig. 5.

II. LEGAL STANDARD

Patent claims define the scope of a patentee's invention, and mark the bounds of the patentee's exclusionary rights.⁴ These limited exclusionary rights are granted in exchange for the patentee's full disclosure of the claimed invention, in sufficient detail to inform others how to make and use the claimed invention. A patent serves an important public notice function — the public is entitled to rely on the scope of the claimed invention, read in light of the patent, its prosecution history, and the knowledge and skill in the art.⁵ A patentee cannot claim as his invention any matter that was not properly claimed and described, nor may a patentee reclaim scope that was dedicated to the public or disclaimed during prosecution.⁶ The public is entitled to take the patentee at his word.⁷

The scope and meaning of a patent claim is a legal issue to be decided by the court.⁸ Claims are interpreted in view of their ordinary and customary meaning, as understood by a person of ordinary skill in the art at the time of the invention.⁹ A person of ordinary skill in the art views the claim term in light of the intrinsic record, which includes the words of the claims, the specification, and the prosecution history.¹⁰ Although the claims and specification are fundamental to the claim construction process, they are not read in a vacuum. “It is, of course,

⁴ *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

⁵ *E.g.*, *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1354 (Fed. Cir. 2010) (en banc).

⁶ *E.g.*, *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 922 (Fed. Cir. 2004); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978 (Fed. Cir. 1995) (en banc); *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 397 (Ct. Cl. 1967).

⁷ *Honeywell Int'l, Inc. v. ITT Indus.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006); *SSL Servs., LLC v. Citrix Sys.*, 816 F. Supp. 2d 364, 381 (E.D. Tex. 2011).

⁸ *Markman*, 52 F.3d at 970-71.

⁹ *Phillips*, 415 F.3d at 1312-13; *Innova/Pure Water, Inc. v. Safari Water Filtration Sys.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004).

¹⁰ *Phillips*, 415 F.3d at 1313; *Markman*, 52 F.3d at 979-80.

well settled that an invention is construed not only in the light of the claims, but also with reference to the file wrapper or prosecution history in the Patent Office.”¹¹

The prosecution history provides evidence of how the Patent Office and the inventor understood the patent.¹² Accordingly, a patent applicant’s statements during prosecution are relevant to claim interpretation.¹³ Particularly relevant are statements made by the applicant concerning the scope of the claimed invention, including statements made to narrow the claimed invention in light of prior art.¹⁴ A patent plaintiff may not recapture through claim construction subject matter that was disclaimed or disavowed by the applicant. Disclaimer may arise through clear or consistent statements in the specification that limit the claimed invention: “[A] patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution.”¹⁵ For example, when an applicant describes the features of “the present invention,” such description may limit the scope of the claimed invention as a whole.¹⁶ Disclaiming statements are especially relevant when they are used to summarize the invention.¹⁷ Disclaimer may also arise from an applicant’s narrowing statements made during prosecution.

¹¹ *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 33 (1966); *see also Nystrom v. Trex Co.*, 424 F.3d 1136, 1144 (Fed. Cir. 2005) (“[A patentee] is not entitled to a claim construction divorced from the context of the written description and prosecution history.”).

¹² *Phillips*, 415 F.3d at 1317.

¹³ *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004).

¹⁴ *Graham*, 383 U.S. at 33 (“Claims as allowed must be read and interpreted with reference to rejected ones and to the state of the prior art; and claims that have been narrowed in order to obtain the issuance of a patent by distinguishing the prior art cannot be sustained to cover that which was previously by limitation eliminated from the patent.”); *Norian Corp. v. Stryker Corp.*, 432 F.3d 1356, 1361 (Fed. Cir. 2005).

¹⁵ *Purdue Pharma L.P. v. Endo Pharms., Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006).

¹⁶ *E.g., Netcraft Corp. v. Ebay, Inc.*, 549 F.3d 1394, 1397-98 (Fed. Cir. 2008); *Verizon Services Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007); *Honeywell*, 452 F.3d at 1318; *Microsoft*, 357 F.3d at 1348.

¹⁷ *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 864 (Fed. Cir. 2004); *Astrazeneca AB v. Mutual Pharm. Co.*, 384 F.3d 1333, 1340 (Fed. Cir. 2004).

This doctrine “promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.”¹⁸

III. THE INTRINSIC EVIDENCE

The claims of the ’845 patent recite methods and systems for coding and decoding video in accordance with the approach described in the specification. Intravidual has asserted four claims, each of which pertains to decoding a macroblock that was previously encoded using the approach described in the ’845 patent.

A. The Specification

The majority of the detailed description, columns 4-11, is devoted to describing the prior art H.263 and H.324 standards and other existing video compression standards, with only columns 12 to 15 devoted to describing the improvement of the claimed invention. For example, with regard to intra-frame coding, the specification describes the existing H.263 techniques for coding macroblocks.¹⁹ The specification describes how the H.263 macroblock coding strategy involves both block transformation and quantizing the blocks. In particular, a block transformer first operates on each 8x8 block within a macroblock to transform the 8x8 block data to the frequency domain.²⁰ Once the data for each 8x8 block is transformed to the frequency domain (referred to in the specification as DCT values), certain data from the 8x8 block can be discarded by the quantizer without diminishing image quality, thereby reducing the amount of data required to code the macroblock.²¹ The specification notes the computational complexity of this approach, and proposes the claimed technique for intra-frame coding based only on calculating the difference between the macroblock to be coded and a reference macroblock in an adjacent

¹⁸ *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003).

¹⁹ ’845 patent 9:15-10:4 (describing I-frame macroblock coding).

²⁰ ’845 patent 9:15-41.

²¹ ’845 patent 9:42-10:4.

position, which can be done with or without the first employing the transformation step of the prior art H.263 method to convert to DCT values.

Dr. Azadegan emphasized that his invention centered on the use of macroblocks as the basis for coding and decoding, including in the title of his patent: “Method and Apparatus for Differential **Macroblock** Coding for Intra-Frame Data in Video Conferencing Systems.”

Likewise, the Abstract provides that comparisons are performed at the macroblock level:

One video coding process involves differential formation for the coding of ***each macroblock in comparison to at least one other macroblock*** within each video picture. Another video coding process involves differential formation for macroblock coding by ***comparison to two macroblocks, including the macroblock immediately to the left of the coding macroblock and the macroblock immediately above the coding macroblock.***²²

The specification describes that adjacent macroblocks in the same frame are compared by calculating their difference, and that encoding is performed at the macroblock level based on that difference calculation. The Summary of the Invention, for example, states that encoding and decoding are “based on the difference between the coding macroblock and the reference macroblock.”²³

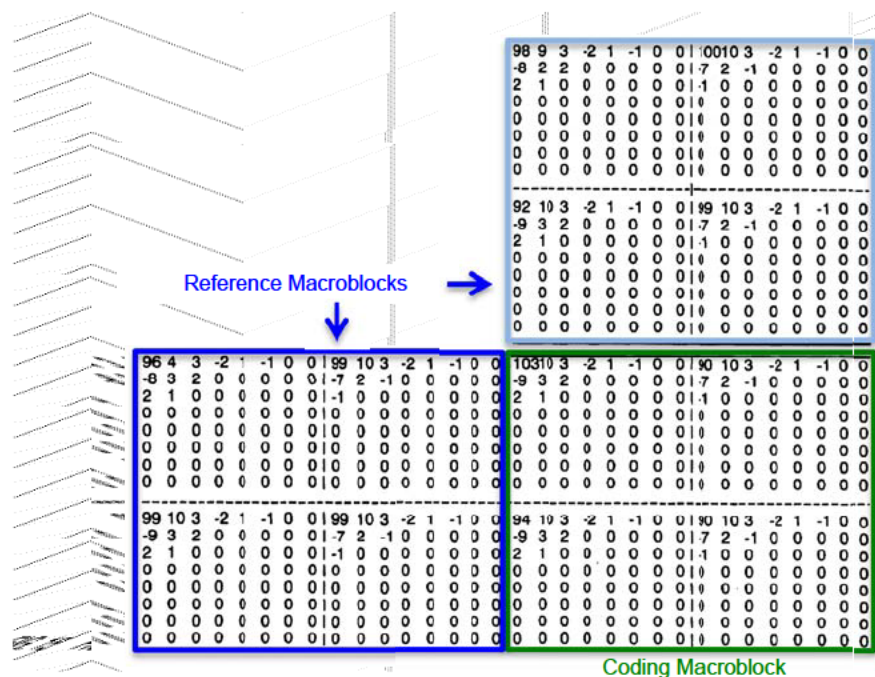
In the detailed description of the claimed invention, Dr. Azadegan again emphasized the use of macroblock differences: “Systems consistent with the present invention compare the coding macroblock with adjacent macroblocks, that is, with the macroblock to its immediate left and the macroblock immediately above.”²⁴ The difference calculation is described in detail in columns 13-15 and figures 13-16. In particular, figure 15 illustrates three adjacent macroblocks containing DCT values (numerical representations of the individual pixels that form a

²² ’845 patent Abstract (emphasis added).

²³ ’845 patent 2:57-59; *see also id.* 2:64-66 (“a determining component configured to determine a difference between the coding macroblock and the reference macroblock”).

²⁴ ’845 patent 12:39-42.

macroblock, calculated via the optional H.263 transform step described above); dashed lines illustrate that each macroblock consists of four blocks.²⁵



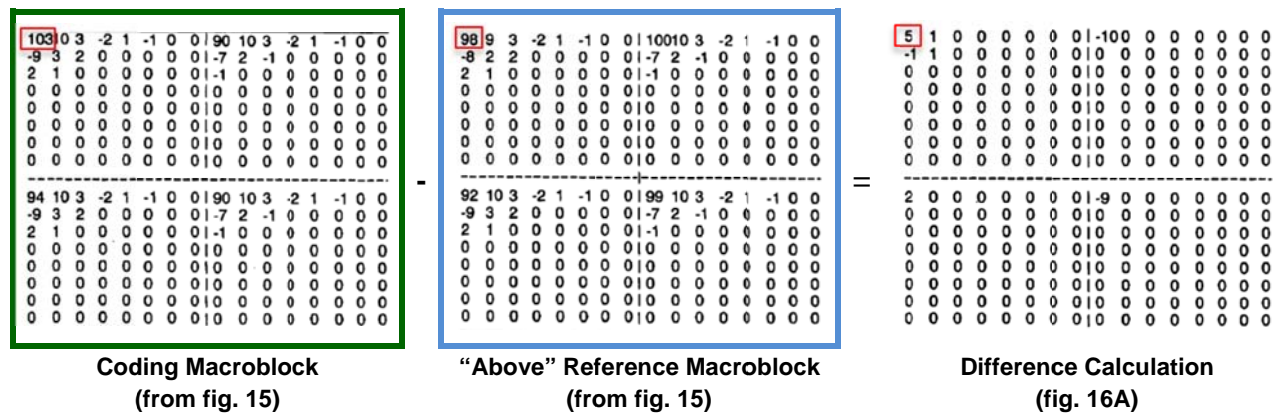
A difference is calculated between actual macroblocks contained in the same frame: “Systems consistent with the present invention take a difference between the coding macroblock and these two reference macroblocks. The difference with the smallest value represents the value to be used for encoding of the coding macroblock according to systems consistent with the invention.”²⁶

as depicted in Figures 16A-B, and described in the specific embodiment, the difference calculation involves all of the pixels in a macroblock. The difference is calculated by comparing each pixel in the coding macroblock with the pixel in a corresponding positional relationship in each reference macroblock. Taking the “above” reference macroblock as an example (outlined

²⁵ '845 patent 14:6-19; *id.* fig. 15 (colored boxes and an rotations added).

²⁶ '845 patent 14:19-24.

in light blue), the upper-left-most pixel is compared to the corresponding pixel in the coding macroblock to determine the difference ($103 - 98 = 5$).²⁷ The values of the remaining pixels in the row are similarly calculated by obtaining the difference of each pixel in the coding macroblock with the corresponding pixel in the reference macroblock (e.g., $10 - 9 = 1$; $3 - 3 = 0$; $(-2) - (-2) = 0$). This is repeated for each pixel position, yielding the result depicted in Figure 16A:²⁸



This process is repeated to calculate a difference between the coding macroblock and the other (“left”) reference macroblock, as depicted in figure 16B.²⁹ The reference macroblock with the smallest difference may be chosen as “the” reference macroblock for the particular macroblock being encoded.³⁰ The macroblock being coded is then coded based on the difference as described in the asserted claims.³¹

²⁷ ’845 patent figs. 15-16.

²⁸ ’845 patent 14:19-39.

²⁹ ’845 patent 14:25-39.

³⁰ ’845 patent 14:35-46. As described in the specification, if the samples are DCT coded, the determination as to which macroblock to use can be based on calculations of the lowest average difference.

³¹ ’845 patent 24:15-20, Claim 63 (“receiving a coded macroblock from the same frame in an adjacent positional relationship to the reference macroblock, **which was coded based on the** (Continued...)”).

For purposes of understanding how to decode the data, the specification teaches that when the system encodes the “coding macroblock” based on the difference, a single-bit component (“IP_MB”), referred to in the claims as the “difference bit,” is set to “one” to indicate to the decoder that the macroblock has been encoded based on the difference calculation as opposed to being coded using the prior art.³² In addition, the specification states that a reference bit “above-left (A/L)” is set to identify whether the above or left the reference macroblock was used for the difference calculation.³³

Coding a macroblock based on the difference from the reference macroblock presented and described in the specification are not mere embodiments; they *are* Dr. Azadegan’s invention. Apart from the fact that no other approach is mentioned, the specification (including the Summary of the Invention) refers to the described approach as “the invention” and “the present invention.”³⁴

B. The Prosecution History

Upon initial review, the USPTO Examiner rejected each and every claim in the original application as anticipated or obvious in light of the prior art.

(...Continued)

difference with the reference macroblock and without reference to any predicted frame to reduce spatial redundancy in the intra-frame coding”) (emphasis added).

³² See, e.g., ’845 patent 12:10-21, 12:39-63 (“IP_MB is preferably a one-bit component, whereby IP_MB equals zero if the standard I-frame format is used, and IP_MB equals one if differential macroblock coding is used.”).

³³ See, e.g., ’845 patent 12:10-21, 12:50-63 (“If IP_MB equals one, and if the difference is based on the macroblock to the left of the macroblock to be coded, A/L equals zero. Similarly, if IP_MB equals one, and if the difference is based on the macroblock above the macroblock to be coded, A/L equals one.”).

³⁴ See, e.g., ’845 patent 2:47-48, 2:54-55, 2:60-61, 3:1-2, 11:59-65, 12:39-42 (“Systems consistent with the present invention compare the coding macroblock with adjacent macroblocks, that is, with the macroblock to its immediate left and the macroblock immediately above.”).

In response to the first Office Action, the applicant amended the claims to limit the claimed invention to coding based on a difference calculation in which the reference macroblock was in an adjacent positional relationship to the coding macroblock in a single frame. With regard to the asserted claims, the following underlined language was added:

“storing . . . a reference macroblock from a single frame;
 . . .
 receiving a coded macroblock from the same frame in an adjacent positional relationship to the reference macroblock, which was coded based on a difference with the reference macroblock; and
 decoding the coded macroblock based on the difference, wherein the step of receiving a coded macroblock includes the substep of receiving a difference bit designating that the coded macroblock is encoded with the difference based on the reference macroblock.”³⁵

The amendments were accompanied by arguments disclaiming anything other than macroblock-based comparisons.³⁶

These arguments were repeated throughout prosecution. For example, to distinguish prior art that disclosed video coding using “blocks” (e.g., 8x8 blocks of pixels) or smaller units of measure as the basis for comparison, the applicant emphasized that the choice of the macroblock as the basis of comparison was more than a mere choice involving degree or size:

After all, the application acknowledges that there are various video coding techniques, but the application also explains that most video coding is directed to inter-frame coding. In contrast, the claimed system is directed to intraframe coding, and this is more than a mere choice involving degree and/or size. ***Furthermore, the claimed system is further directed to intra-frame coding using macroblocks as the basis of comparison under the claimed coding technique, and again, this is also more than a mere choice involving degree and/or size.*** Indeed, in Rose, the CCPA rejected a limitation as patentably significant, where the limitation “at most relates to the size of the article.” Id. (Emphasis added.) The choice to base an intra-frame video coding system on macroblocks is related to

³⁵ ’845 File History, 12/13/1999 Amendments at 2-6 (underlining in original) (emphasis added) [INTRA00000318-322]. The File history is attached as Exhibit 1 to the Declaration of Aaron R. Hand (“Hand Decl.”), filed herewith.

³⁶ *Id.* at 10-12 (underlining in original) [INTRA00000326-328].

more than mere size. Therefore, Rose does not apply, because the claimed technique for intra-frame coding using macroblocks is “patentably significant.”³⁷

As discussed above, a macroblock is composed of smaller units (e.g., blocks, which in turn are composed of pixels). The applicant made clear that unlike the prior art, the invention disclosed in the ’845 patent was novel because it based the difference calculation on the entire “macroblock” rather than some subset of a macroblock (e.g., constituent “blocks”):

Similarly, using a macroblock as the basis of intra-frame coding is similarly significant. Indeed, intra-frame coding on blocks performs differently than intra-frame coding on macroblocks, and therefore, the distinction between these coding techniques constitutes ‘constructive significance.’³⁸

Notwithstanding these arguments, the Examiner did not allow the claims. The applicant had to appeal the Board of Patent Appeals. In the applicant’s Appeal Brief, the applicant again made similar arguments.³⁹ The applicant stated that the “claims of the present invention are directed to macroblock intra-frame coding based on determining a difference or a determined difference,” pointing to the difference calculation depicted in Figures 16A-16B (carried out on a pixel-by-pixel basis over the entire macroblock).⁴⁰ The BAPI agreed, finding these features distinguishing features over the prior art:

After a review of Fuji, we agree with Appellant’s assertion that the claimed encoding the selected macroblock based on the difference determined between a

³⁷ ’845 File History, 2/17/2000 Amendment After Final at 6 (emphasis added) [INTRA00000391]; *id.* at 10-11 [INTRA00000395-397].

³⁸ ’845 File History, 2/17/2000 Amendment After Final at 8 [INTRA00000393].

³⁹ *E.g.*, ’845 File History, 11/27/2001 Revised Appeal Brief Under 37 C.F.R. § 1.192 at 2-3 (“The coding of a macroblock with a difference by macroblock intra-frame coding in accordance with the claimed invention occurs by determining a mathematical difference between one macroblock and another macroblock in an adjacent positional relationship.”) [INTRA00000627-628].

⁴⁰ *E.g.*, *Id.* at 12-13 [INTRA00000637-638]; 2/25/2002 Reply Brief Under 37 C.F.R. § 1.193(b) at 4-6 (“determining a mathematical difference between macroblocks in an intra-frame”) [INTRA00000675-676].

selected macroblock and an adjacent macroblock and assigning a difference bit, are absent in the reference.”⁴¹

The arguments and amendments advanced during prosecution, none of which are even mentioned in Intravisual’s Opening Brief, confirm the claims of the ’845 patent are limited to encoding based on calculating the difference between adjacent macroblocks. The applicant disclaimed difference calculations that utilize anything smaller than a macroblock (e.g., a block or a group of pixels from the macroblock), or any other form of encoding.⁴²

The applicant made related concessions and limiting amendments with regard to the “reference bit” and the “difference bit.” With regard to the “reference bit,” the applicant limited the “reference bit” to one bit consistent with the specification. The applicant explained that the coding technique of comparing to a macroblock in an adjacent position meant that the position of the macroblock being compared could advantageously be designated by just one bit:

On page 23 of the specification, there is an explanation of this relationship between the coding macroblock and the reference macroblock. As described there, the intra-frame coding of the claimed system compares a coding macroblock to adjacent macroblocks. Indeed, because the claimed system compares a coding macroblock to adjacent macroblocks, only a one bit is needed to identify the position of the reference macroblock.⁴³

Although the original claims included the one bit reference bit, the original claims did not include any indicator of whether the coding was based on a difference calculation between the macroblock. But such a limitation was added to the asserted claims to overcome the prior art as follows: “wherein the step of receiving a coded macroblock includes the substep of receiving a difference bit designating that the coded macroblock is encoded with the difference based on

⁴¹ E.g., ‘845 File History, 4/7/2003 Decision on Appeal at 5 [INTRA00000691]; *see also id.* at 2-7 [INTRA00000688-693].

⁴² *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1377 (Fed. Cir. 2008) (disavowal based on distinctions from the prior art during prosecution); *Hockerson-Halberstadt, Inc. v. Avia Group Int’l, Inc.*, 222 F.3d 951, 957 (Fed. Cir. 2000).

⁴³ ’845 File History, 12/13/1999 Remarks at 11 (emphasis added) [INTRA00000327].

the reference macroblock.”⁴⁴ Notably, the applicant chose to add this field as a “difference bit,” also a one bit field consistent with the specification.

C. The Claims

Each of the asserted claims recite receiving a coded macroblock that was coded based on the difference calculated on a macroblock-by-macroblock level. Claim 63 is representative:

63. A method of decoding for intra-frame encoding with an intra-frame, comprising the steps, performed by a processor, of:

- storing a reference macroblock from a single frame;
- receiving a ***coded macroblock from the same frame in an adjacent positional relationship to the reference macroblock, which was coded based on a difference with the reference macroblock*** and without reference to any predicted frame to reduce spatial redundancy in the intra-frame coding; and
- decoding the coded macroblock based on the difference,

wherein the step of receiving a coded macroblock includes the substep of receiving a difference bit designating that the coded macroblock is encoded with the difference based on the reference macroblock.

The emphasized text indicates that the coded macroblock was coded based on a difference with ***the*** reference macroblock, and that the macroblocks are in an adjacent positional relationship.

Dependent claim 64 adds an additional limitation concerning the receipt and purpose of the separate reference bit:

64. The method according to claim 63, wherein the step of receiving a coded macroblock further includes the substep of

- receiving a reference bit designating the location of the reference macroblock against which the difference is determined for decoding the coded macroblock.

Asserted claims 65-66 recite various “components” configured to perform the very same steps recited in asserted method claims 63-64.

⁴⁴ ’845 File History, 12/13/1999 Remarks at 14 [INTRA00000330].

IV. CONSTRUCTION OF DISPUTED TERMS

A. “difference with the reference macroblock”

Defendants’ Proposed Construction	Intravidual’s Proposed Construction
the data remaining after subtracting each pixel of the 16x16 region to be coded with the corresponding pixel from the reference macroblock (as defined)	plain meaning; or in the alternative: the data remaining after subtracting the 16x16 region to be coded with data from reference macroblock (as defined)

The ’845 patent is limited to encoding “based on a difference with the reference macroblock.” Defendants’ proposed construction is consistent with the intrinsic evidence. Intravidual’s addition of “data from” the reference macroblock, in contrast, would broaden the claims to permit a difference calculation to be based on a portion of a reference macroblock is thus inconsistent with the intrinsic record.

1. **The plain and ordinary meaning of the claim language requires that the difference take into account the entire reference macroblock.**

The asserted claims provide that the coded macroblock is coded “based on a difference with the reference macroblock.” The plain and ordinary meaning of the claims suggests a macroblock-to-macroblock comparison, and not a comparison using “data from” the reference macroblock. “The” is commonly understood to indicate a reference to a group as a whole, as recognized by at least one district court, and affirmed by the Federal Circuit.⁴⁵ Defendants’ definition is consistent with the plain meaning of the claim.

⁴⁵ See *VLT Corp. v. Lambda Electronics, Inc.*, 238 F. Supp. 2d 347 (D. Mass. 2003) (reference to “the energy” means all of the energy) (citing *Merriam-Webster’s Collegiate Dictionary* 1221 (10th ed. 1993) (giving one definition of “the” as: “used as a function word before a noun . . . to indicate reference to a group as a whole”)); *VLT, Inc. v. Artesyn Techs., Inc.*, 103 Fed. Appx. 356, 360 (Fed. Cir. 2004) (“Accordingly, we affirm the district court’s construction of the phrase ‘recycling the magnetizing energy stored in said transformer to reset it’ as requiring that all of the magnetizing energy removed from the transformer’s core be returned to the transformer to reset it.”) (emphasis added).

2. The '845 patent is limited to macroblock-based difference calculations as described in the specification and file history.

The intrinsic evidence limits the invention to coding based on difference calculations that utilize the entire macroblock; the use of any other unit (or subset) for comparison is disclaimed. As set forth above, the specification describes macroblock-based comparison as “the invention” and “the present invention.” Such language operates as a disclaimer that limits the claim scope accordingly.⁴⁶ This is particularly true when, as here, the language is included in the Title, Abstract and the Summary of the Invention, which describes the invention as a whole.⁴⁷ In addition, the specification fails to describe any concepts broader than the specific approach recited in the specification (itself a narrow improvement to the then-existing H.263 standard); the claims are therefore limited to techniques that utilize the entire macroblock as the basis for comparison — the only embodiment described and supported in the specification.⁴⁸

As described in Section III.B. above, the applicant also limited the scope of the claimed invention during prosecution to systems that code a macroblock using a reference macroblock as the basis for comparison. The public is entitled to rely on the patentee’s statements concerning the claim scope, and the patentee is barred from recapturing that which was surrendered during prosecution.⁴⁹ The '845 patent is limited to the macroblock-based difference calculations, performed on a pixel-by-pixel basis as described in the specification (“consistent with the present invention”), and emphasized in the Applicant’s Revised BPAI Appeal Brief:

⁴⁶ *Microsoft Corp.*, 357 F.3d at 1348); *Verizon Servs. Corp. v. Vonage Holds. Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007); *Honeywell Int’l Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006); *Watts v. XL Sys., Inc.*, 232 F.3d 877, 883 (Fed. Cir. 2000); *Versata Software, Inc. v. SAP Am., Inc.*, No. 2:07-cv-153, 2009 U.S. Dist. LEXIS 45751, at *18 (E.D. Tex. May 19, 2009).

⁴⁷ See *C.R. Bard*, 388 F.3d at 864 (“Statements that describe the invention as a whole are more likely to be found in certain sections of the specification, such as the Summary of the Invention.”).

⁴⁸ *Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1301 (Fed. Cir. 1999) (“This is not simply the preferred embodiment; it is the only embodiment.”).

⁴⁹ *Hockerson-Halberstadt*, 222 F.3d at 957 (“The prosecution history constitutes a public record of the patentee’s representations concerning the scope and meaning of the claims . . .”).

The claims *of the present application* are directed to *macroblock intra-frame coding based on determining a difference or a determined difference*. Figures 16A and 16B of the application *depict the computation of a difference between macroblocks*. Application, Figs. 16A-16B; Application, at 7. *The difference is a mathematical difference based on the comparison of one macroblock to another* in an intra-frame.⁵⁰

This statement (and others like it) serve as a disclaimer, limiting the '845 patent claims.⁵¹

3. Intravisual's arguments do not overcome the intrinsic record

Intravisual supports its “data from” construction with two arguments, neither of which is persuasive. First, Intravisual claims that “[t]hough a difference between macroblocks is calculated to facilitate video compression in accordance with the invention of the '845 Patent, there is no limitation on what the precise calculation must be so long as it is based on data from the relevant macroblocks.”⁵² But this is wrong — the claim language itself requires a difference calculation: “based on a difference with the reference macroblock.”

Next, Intravisual claims that its “data from” language is supported because “an exemplary” embodiment allegedly refers to using “an average value for all pixels” to calculate the difference.⁵³ Here, Intravisual just ignores the teaching of the specification. The referenced “average value” results from the prior art H.263 transformation process described in the

⁵⁰ '845 File History, 11/27/2001 Revised Appeal Brief at 13 [INTRA00000638]; *see also id.*, 2/17/2000 Amendment at 9 (“[B]ecause Mounts et al. applies inter-frame coding using blocks (as done by virtually all of the prior art in the field of video coding), this reference (and virtually all prior art in the field) actually teaches away from using intra-frame coding using macroblocks.”) (underlining in original) [INTRA00000394].

⁵¹ Although not addressed in its opening brief, it is expected that Intravisual may rely on a passing reference to other embodiments that could operate “on other levels of a video sequence, including blocks and groups of blocks” in its reply. '845 patent 4:47-49. The asserted claims do not encompass such embodiments for at least two reasons. First, each claim recites the use of “macroblocks”; no claim encompasses a contrary unit of comparison. Second, as discussed above, the applicant's arguments and amendments during prosecution unambiguously disclaim such contrary embodiments. Any contrary arguments, which ignore the file history, are unavailing and in disregard of clear precedent.

⁵² Intravisual's Brief at 10.

⁵³ *Id.*

specification. As described, “the coefficient in the upper left-hand corner represents the average of the entire [8x8] block . . . ,” with each coding macroblock containing four such values corresponding to the four 8x8 blocks within the macroblock.⁵⁴ If this optional coding is used with the claimed method, the specification teaches that the four average values in the macroblock can be used to select the adjacent macroblock that should be used for coding the difference — but nothing more. Once the reference macroblock is selected using the average difference, the coding occurs “as illustrated by the difference in FIG 16A,” which as shown above, is a pixel-by-pixel difference calculation.⁵⁵

4. The ’845 patent does not encompass the use of a subset of pixels from a macroblock for difference calculations.

Intravidual’s proposed claim construction reflects an effort to read the claims to encompass the use of neighboring *pixels* instead of the entire neighboring macroblock as a basis for comparison in intra-frame encoding. As set forth above, the claims are limited to difference calculations based on the entire macroblock. Intravidual’s proposed construction using “data from” a neighboring macroblock would read directly on many of the prior art references overcome by limiting arguments and amendments in the prosecution history.

B. “encoded with the difference based on the reference macroblock”

Defendants’ Proposed Construction	Intravidual’s Proposed Construction
a macroblock to which the difference (defined above) has been applied	plain meaning; or in the alternative: encoded based on the data remaining after subtracting the 16x16 region to be coded with data from reference macroblock (as defined)

⁵⁴ ’845 patent 9:27-30; 14:10-12.

⁵⁵ *Id.*

The parties' dispute concerning the "encoded with the difference based on the reference macroblock" term is, in essence, the same dispute described above — Intravidual seeks to rewrite the claim to encompass the use of "data from" the reference macroblock to calculate the difference. Defendants' construction, which incorporates the difference definition, is proper for the reasons set forth in Section IV.A above. In addition, Defendants' definition explains what "encoded" means within the context of the claim, and is accurate with respect to each of the occurrences where the phrase is recited.

C. "difference bit" and "reference bit"

Defendants' Proposed Constructions	Intravidual's Proposed Constructions
"difference bit"	
a binary digit (0 or 1) associated with each coded macroblock	plain meaning; or in the alternative: an indication in the syntax
"reference bit"	
another binary digit (0 or 1) associated with each coded macroblock	plain meaning; or in the alternative: an additional indication in the syntax

As described above, a purported novel feature of Dr. Azadegan's invention was the ability to indicate whether a macroblock was encoded with a difference as well as the ability to indicate the location of the reference macroblock. In the specification, the difference bit is designated "IP_MB"⁵⁶ and the reference bit is designated "A/L" for "above" or "left."⁵⁷ When introduced, IP_MB is described as "preferably a one bit component," where IP_MB only has two values (0=standard encoding, 1=difference encoding). Similarly, where the comparison is made to only two other macroblocks (as set forth in the claims as limited by the prosecution history), then A/L is also only a one bit component that holds the value of 0 when the "left" macroblock is used and holds the value of 1 when the "above" macroblock is used. IP_MB and A/L are depicted in Figure 10:

⁵⁶ '845 patent 12:45-51 (IP_MB "designates whether the difference of a macroblock is encoded, or whether the macroblock is coded by standard I-frame coding.").

⁵⁷ '845 patent 12:51-52.

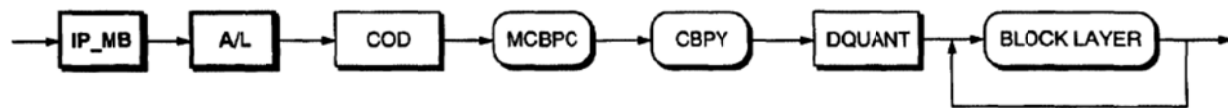


FIG. 10

The dark square boxes, such as IP_MB and A/L, represent fixed length fields.⁵⁸ Indeed, the applicant specified that “IP_MB, A/L, and COD, [. . .] **are one-bit**, fixed-length components.”⁵⁹ The specification consistently refers to the use of a single-bit difference bit and a single-bit reference bit.⁶⁰

In addition, the applicant disavowed any scope other than a one bit component. In the initial amendment limiting the claims to comparison with an adjacent macroblock to the left or above, the applicant also explained the novelty of the use of a single bit “reference bit”: “Indeed, because the claimed system compares a coding macroblock to adjacent macroblocks, **only a one bit is needed to identify the location of the reference macroblock.**”⁶¹ In response to the same office action, the applicant added the “difference bit” limitation for “designating that the encoded macroblock is encoded with the difference based on the reference macroblock,” which is the one bit embodiment described in the specification. Defendants’ definition is consistent with the plain and ordinary meaning of “bit”: a binary digit, indicated as a one or a zero.⁶²

Intravidual’s proposal seeks to rewrite the claims to permit the difference bit and the reference bit to encompass more than a single bit (and, indeed, *any indication*), contrary to the

⁵⁸ ’845 patent 10:46-49 (“The boxes represent fixed-length entities and the ovals represent variable-length entities.”); 12:14-21, 12:64-13:2 (describing bold boxes in figs. 9-11 as depicting additions to I-frame coding syntax).

⁵⁹ ’845 patent 14:64-15:1 (emphasis added).

⁶⁰ E.g., ’845 patent 14:67-15:1 (“In contrast to the IP_MB, A/L, and COD, **which are one-bit**, fixed-length components”); *see also id.* at 12:50-63.

⁶¹ ’845 File History, 12/8/1999 Applicant’s Response to Office Action (Paper No. 3) at 11-12, 14 (emphasis added) [INTRA00000327-328].

⁶² The IEEE Standard Dictionary of Electrical and Electronics Terms at 94 (6th ed. 1996) (Hand Decl., Ex. 2).

specification and file history as described above. Intravisual argues that a single statement in the specification concerning use of an “increased” number of bits means that the invention is not limited to a one-bit representation, but that excerpt supports Defendants’ contention. The cited excerpt mentions that in a two-reference block embodiment, it would be more efficient to limit the size of the IP_MB (i.e., the difference bit) and A/L (i.e., the reference bit) to a single bit. As described above, the claims are limited to a two-reference block embodiment and “a reference bit” and “a difference bit,” both of which are a single bit.

Intravisual incorrectly argues that the difference bit and the reference bit do not have to be “associated with” the coded macroblock, pointing to a statement in the specification that coding may be conveyed “at the picture level or the macroblock level.”⁶³ Claims 63 and 64, however, explicitly state that the steps of receiving the difference bit and the reference bit are substeps of the “receiving the coded macroblock” claim element. Thus, according to the plain meaning of the asserted claims, one difference bit and one reference bit is received with each coded macroblock. Defendants’ proposed construction expressly incorporates this concept. Although it may be true that coding can be conveyed at the picture level, the patentee did not describe or claim such a technique. Moreover, Intravisual’s proposed “indication in the syntax” construction has no relation to such technique, does nothing to aid the jury’s understanding, and is divorced from the intrinsic record.⁶⁴

D. “macroblock” / “reference macroblock” / “coded macroblock”

Intravisual’s primary focus with regard to the “macroblock” claim terms is on whether a definition perfectly “plugs into” the claim. But Defendants have endeavored to provide a

⁶³ Intravisual’s Brief at 12-13 (citing ’845 patent 9:10-11).

⁶⁴ The specification refers generally to the figures as “syntax diagrams” to describe the structure of the macroblock layer, not with respect to the meaning of the reference or difference bits of the claims. See ’845 patent 10:46-48 (“FIG. 8 illustrates a *syntax diagram* showing the utilized elements of macroblock layer 500 for various coding strategies.”); *id.* at 10:49-52, 12:10-14, 12:64-66 (each referring to figures as “syntax diagrams”).

meaningful definition for jurors seeking to understand what a term means in the context of a claim. Defendants' proposed constructions do not add "new" limitations, but rather reflect explicit limitations already present in the claims.

1. "macroblock"

Defendants' Proposed Construction	Intravidual's Proposed Construction
a 16 pixel x 16 pixel (16x16) region of a single frame (i.e., picture or image)	plain meaning; or in the alternative: a 16x16 region of the image

Defendants believe that their proposed construction provides proper context for jurors seeking to understand what a macroblock is, and the construction is entirely consistent with the specification and the file history. Intravidual does not dispute that the asserted claims are limited to a single frame (i.e., picture or image), nor does it dispute that "16x16" means "16 pixels x 16 lines." As a result, the parties' proposals appear to reflect the same ultimate meaning.⁶⁵ The Court should adopt Defendants' proposed construction because it is consistent with the intrinsic evidence (e.g., limiting the invention to coding within a single frame) and it provides the more clear explanation for the jury.

2. "reference macroblock"

Defendants' Proposed Construction	Intravidual's Proposed Construction
a 16x16 region from the same frame but having a different location than the coded macroblock	plain meaning; or in the alternative: a 16x16 region of the image

Intravidual concedes that a reference macroblock of the claims must have a different location than the coded macroblock (and therefore must be different than the coded macroblock),⁶⁶ confirming that Defendants' proposed construction is accurate and consistent with the '845 patent. Further, given the manner in which Intravidual is expected to contort the claim to argue infringement, it is significant that the "reference macroblock" is an actual region

⁶⁵ Intravidual's Brief at 5.

⁶⁶ Intravidual's Brief at 7.

of the same frame as the coding macroblock, and not “data representing” a 16x16 image of the frame. Intravidual appears to agree with this limitation given its definition of “coded macroblock” as “data representing” the image. Defendants’ proposed construction should be adopted.

3. “coded macroblock”

Defendants’ Proposed Construction	Intravidual’s Proposed Construction
the macroblock being decoded	plain meaning; or in the alternative: data representing a 16x16 region of the image

Intravidual’s proposed definition is a red herring because it seeks to expand the meaning of the “coded macroblock” beyond the bounds of the claimed invention. A “coded macroblock” is the macroblock being decoded in the asserted claims, and therefore must have first been encoded consistent with the approach recited in the ’845 specification as further limited during prosecution. The “coded macroblock” — and attendant compression advantages — is the essence of Dr. Azadegan’s invention. Defendants’ proposed construction reflects this meaning and is consistent with the intrinsic evidence. Intravidual’s definition, “data representing a 16x16 region of the image,” in no way restricts the meaning of the coded macroblock to the claimed invention — it could encompass nearly any “data representation.” Intravidual’s proposed construction is an improper attempt to inject ambiguity solely as a litigation tactic. Intravidual’s need to do so confirms that its proposed “difference” definitions are inconsistent with the intrinsic evidence.

E. Storing Component,” “Receiving Component,” and “Decoding Component” Should Be Construed Under 35 U.S.C. § 112 ¶ 6

Although the sections above summarize the primary dispute between the parties regarding the scope of the claim, Defendants also assert that Intravidual is also attempting to avoid the proper construction of claim 65 and 66. Thus, the following section and Texas Instrument’s accompanying summary judgment motion address the proper construction of and indefiniteness of claims 65 and 66 in view of the proper constructions.

The terms “storing component” and “decoding component” used in claim 65 and the term “receiving component” used in claims 65 and 66 should be construed as means-plus-function elements governed by 35 U.S.C. § 112 ¶ 6. While an absence of “means” language within a claim creates a presumption that § 112 ¶ 6 does not apply, this presumption is overcome where the claim phrase is purely functional or does not recite a sufficiently definite structure for performing the claimed function.⁶⁷ Inquiry into whether a term is governed by § 112 ¶ 6 is from the perspective of one of ordinary skill.⁶⁸ In the present case, the disputed claim terms are recited in functional language. They are neither defined in the specification nor do they carry a generally well understood meaning in the art to connote a definite structure to a skilled artisan. Thus, the three terms should be construed as means-plus-function claim elements.

1. The Disputed Terms Are Purely Functional Terms

System claims 65 and 66 are phrased solely in functional terms. The “storing component” element recites the function of storing a reference macroblock, the “decoding component” element recites the function of decoding a coded macroblock, and the “receiving component” element recites the function of receiving a coded macroblock. The remainder of the claim language specifies only the properties of the coded macroblock and does not describe any structure. In fact, claims 65 and 66 are nearly identical to method claims that precede them; the patentee simply added “storing component,” “receiving component” and “decoding component” to the limitations of the method claims in order to draft the system claims.⁶⁹ If claims 63 and 64

⁶⁷ *Massachusetts Institute of Technology v. Abacus Software*, 462 F.3d 1344, 1353 (Fed. Cir. 2006).

⁶⁸ *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1373 (Fed. Cir. 2003) (“[A] proper determination of whether the claim limitations should be construed as means-plus-function limitations requires an understanding of one of ordinary skill in the art.”).

⁶⁹ The first limitation of method claim 63 requires “storing a reference macroblock from a single frame.” The first limitation of claim 64 reads: “a storing component configured to store a reference macroblock from a single frame.” The “receiving component” and “decoding component” limitations from claims 65 and 66 similarly mimic the method claims 63 and 64.

are valid method claims, they cannot recite any structure because that would violate the rule against having method and apparatus limitations in the same claim.⁷⁰ Thus, the language of claims 65 and 66 is functional by definition and cannot impart any structure to the terms.

The specification of the '845 patent confirms that the patentee intended the three disputed terms to be purely functional terms. First, the disputed terms are not explicitly defined in either the specification or in the file history. Second, these terms are employed in the specification in a manner intended to convey *not* a structure, but rather a functional aspect. The three terms collectively appear only the Summary of Invention, where the patentee described *not* a “system of decoding,” but a “method of decoding”:

Still another aspect of the invention includes a **method of decoding**. This **method** comprises a **storing component** configured to store a reference macroblock; a **receiving component** configured to receive a coded macroblock, which was coded based on a difference with the reference macroblock; and a **decoding component** configured to decode the coded macroblock based on the difference.⁷¹

By employing the disputed terms solely in the context of describing a method, the patentee in a manner acted as his own lexicographer and ruled out the possibility that these terms can be used to connote a structure.

2. The Disputed Terms Do Not Convey Structure

The disputed terms “storing component,” “receiving component” and “decoding component” are not commonly used in the art. They do not have a reasonably well understood meaning in the art that connotes a definite structure to perform the recited functions.⁷²

Intravidual’s failure to cite to a technical dictionary, a technical treatise, or any other extrinsic evidence simply underscores that these terms lack a well understood meaning in the art.

⁷⁰ In *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (2005) (holding that a single claim, which covers both a method and apparatus, is indefinite under § 112 ¶ 6).

⁷¹ '845 patent 3:1-7 (emphasis added).

⁷² Declaration of Dr. Robert L. Stevenson ¶¶ 11 (filed herewith).

The patentee's use of the generic term "component" with adjectival modifiers also fails to convey structure. The patentee used the generic term "component," which fails to convey a definite structure by itself and is not defined in the specification.⁷³ The Federal Circuit has found that "generic terms 'mechanism,' 'means,' 'element,' and 'device,' typically do not connote sufficiently definite structure."⁷⁴ Accordingly, the disputed terms are "nonce words" that are not recognized as the name for structure and simply are a substitute for the term "means for."⁷⁵ Second, use of the adjectival modifiers "storing," "receiving," and "decoding" before "component" fails to impart a definite structure to these terms that would shield them from the ambit of § 112 ¶ 6. An adjectival modifier may add sufficient structure to a generic term if the modifier is defined in the specification or has a generally understood structural meaning within the art.⁷⁶ For example, the Federal Circuit, after examining several dictionary definitions, held that § 112 ¶ 6 did not apply to "detent mechanism" because the noun "detent" denotes a type of

⁷³ The specification confirms the amorphous nature of the term "component." It is employed more than 45 times in the Detailed Description as a component of color difference, a component to a protocol of the macroblock layer, a component of TV signals, a component of a vector, and as difference bit and reference bit components. It is used only once to refer to eight different constituent parts of terminal 3 that perform, not one, but eight disparate functions.

⁷⁴ *MIT*, 462 F.3d 1344.

⁷⁵ *Id.*

⁷⁶ *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1096 (Fed. Cir. 2008) ("Although '[c]laim language that further defines a generic term like "mechanism" can sometimes add sufficient structure to avoid 35 U.S.C. § 112 ¶ 6,' the adjectival modifier 'colorant selection' was not defined in the specification and did not carry any generally understood structural meaning in the art." (quoting *MIT*, 462 F.3d at 1354)).

device with a generally well-understood meaning in the mechanical arts.⁷⁷ Unlike the term “detent,” the adjectival modifiers in the disputed terms do not carry such a meaning.⁷⁸

The Federal Circuit has reached the same conclusion in many similar cases. In *Power Integrations v. Fairchild Semiconductor*, the term “soft start circuit” was governed by § 112 ¶ 6 even though the word “means” was not used in the claim term.⁷⁹ Although one skilled in the art would know the functionality of soft start, the Court was not persuaded that such a person would know the precise structures of a soft start circuit because the function of the soft start circuit can be performed in a variety of ways, making it unclear what the specific structures are for performing the recited function.⁸⁰ In *Isogon Corp. v. Amdahl Corp.*, the court was faced with terms that parallel the disputed terms: “event detector for detecting,” “recorder for recording,” and “report generator for outputting.”⁸¹ Those terms were held to be subject to § 112 ¶ 6 because the claims contained no recitation of structure and were dominated by functional description.⁸² Likewise, in *Mas-Hamilton Group v. LaGard, Inc.*, the Federal Circuit held that a claim phrase “lever moving element” fell under § 112 ¶ 6 because the claim did not recite any structure for performing the claimed function.⁸³ Similarly, in *Massachusetts Institute of Technology v. Abacus Software*, the Federal Circuit held that the disputed claim phrase “colorant

⁷⁷ *Greenberg v. Ethicon Endo-Surgery*, 91 F.3d 1580, 1583 (Fed. Cir. 1996) (“Dictionary definitions make clear that the noun ‘detent’ denotes a type of device with a generally understood meaning in the mechanical arts, even though the definitions are expressed in functional terms.”).

⁷⁸ *E.g. Phillips*, 415 F.3d at 1311 (holding that the term “steel baffles” was not a means-plus-function limitation where the “claims and specification unmistakably establish that the ‘steel baffles’ refer to a particular physical apparatus.”).

⁷⁹ *Power Integrations v. Fairchild Semiconductor*, 422 F. Supp. 2d 446, 450-60 (D.Del. 2006).

⁸⁰ *Id.* at 459-60.

⁸¹ *Isogon Corp. v. Amdahl Corp.*, 47 F. Supp. 2d 436, 449 (S.D.N.Y. 1998).

⁸² *Id.* at 449-50.

⁸³ *Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206 (Fed. Cir. 1998).

selection mechanism” fell under § 112 ¶ 6 because it was functional and did not provide sufficiently definite structure.⁸⁴ In both of these cases, the claims did not recite “means.”

3. The Cases Cited By Intravisual Are Distinguishable

Intravisual cannot avoid § 112 ¶ 6 treatment by arguing that a person of ordinary skill would understand the structure based on the functionality of the modifiers. In its attempt to lend some structure to the disputed terms, Intravisual argues that the specification describes “video codec 110” and “audio codec 112” and that it is well known that “codecs” are implemented in hardware or software. But, unlike the cases that Intravisual relies upon, none of these terms (*i.e.*, audio codec, video codec, and codec) occur in the asserted claims and none of these terms is explicitly equated to the disputed terms in specification.

Intravisual’s reliance on *Leader Technologies, Inc. v. Facebook, Inc.* to argue that the disputed terms are not means-plus-function claims is to no avail.⁸⁵ In that case, the Court concluded that the terms “context component,” “tracking component,” and “storage component” were not governed by § 112 ¶ 6. The Court’s conclusion rested on the fact that the term “component” was explicitly defined in the specification and the phrasing used in the claims conveyed sufficient structural identification for the claim terms.⁸⁶ In the instant case, neither “component” nor the disputed terms have been defined in the specification or the file history. Nor are the claims containing the disputed terms phrased in a manner that imparts any structure to the terms.⁸⁷ In *Lighting World Inc. v. Birchwood Lighting Inc.*, the term “connector

⁸⁴ *MIT*, 462 F.3d at 1354.

⁸⁵ *Leader Technologies, Inc. v. Facebook, Inc.*, 692 F.Supp. 2d 425 (D. Del. 2010).

⁸⁶ The term “context component” was phrased in the claims as “a computer-implemented context component of the network-based system,” and “a computer-implemented context component of a web-based server,” respectively. *Id.* at 432. The other two terms were also phrased in a similar manner in the claims.

⁸⁷ Even though the specification did not define “component” in *eWinWin Inc., v. Groupon Inc.*, No. 8:10-cv-2678, 2011 WL 6012194, at *15-16 (M.D. Fla. Sept. 5, 2011), Intravisual fails to point out that the claim-at-issue provided structure for the term “component.” Unlike the instant
(Continued...)

assembly” escaped the ambit of § 112 ¶ 6 because the Court found that the term “connector” had “a generally well understood meaning as demonstrated by the dictionary definitions of the terms” and the term had been used “more than 40 times” in the specification as description of the structure.⁸⁸ Similarly, in other cases cited by Intravisual, the term at issue either had a well understood meaning in the art as evidenced by dictionary definitions or had been defined in the specification.⁸⁹

V. CONCLUSION

Patent claims must be construed in light of the specification, the prosecution history, and the skill in the art. Defendants’ proposed constructions remain true to the intrinsic record, and accurately account not only for the plain language in the ’845 patent, but also for arguments and amendments advanced by the applicant in order to secure allowance of his claimed invention. Intravisual’s proposals, however, disregard the intrinsic record — in fact, Intravisual’s Brief wholly ignores the prosecution history, and treats that applicant’s substantial discussion of the prior art as though it were the claimed invention. Intravisual’s proposed constructions do little to clarify or accurately portray the meaning of the asserted claims, but rather inject ambiguity for litigation purposes. Defendants respectfully request that the Court enter their proposed constructions.

(...Continued)

case, the claim equated “component” to “at least one processor coupled to a memory that executes the following computer executable components.”

⁸⁸ *Lighting World Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1360-62 (Fed. Cir. 2004).

⁸⁹ *Inventio AG v. Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1357-61 (Fed. Cir. 2011) (holding that 112 ¶ 6 did not apply to terms “modernizing device” and “computing unit” because the specification defined them as a structural component, provided block diagrams of the terms, and described their structure and operation); *Beneficial Innovations, Inc. v. Blockdot, Inc.*, No. 2:07-CV-263-TJW-CE, 2010 U.S. Dist. LEXIS 35784, at **39-42 (E.D. Tex April 12, 2010) (relying on description in the specification and dictionary definition to hold that “advertising selector” was not a means-plus-function term).

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Respectfully Submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on July 2, 2012, I electronically filed the foregoing with the Clerk of the Court for the United States District Court for the Eastern District of Texas, Marshall Division, via the CM/ECF system, which will send a notice of filing to all counsel of record who have consented to service by electronic means.

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